

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 6

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 11/24/2014		2. CONTRACT NO. (If any) EP-W-10-056		6. SHIP TO: a. NAME OF CONSIGNEE SRRPOD	
3. ORDER NO. 0079		4. REQUISITION/REFERENCE NO. PR-OSWER-15-00012			
5. ISSUING OFFICE (Address correspondence to) SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460				b. STREET ADDRESS US Environmental Protection Agency USEPA Ronald Reagan Building (RRB) 1300 Pennsylvania Avenue NW	
				c. CITY Washington	e. ZIP CODE 20004
7. TO: a. NAME OF CONTRACTOR ICF INCORPORATED, L.L.C.				f. SHIP VIA	
b. COMPANY NAME				8. TYPE OF ORDER <input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 9300 LEE HIGHWAY				REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 220316050		

9. ACCOUNTING AND APPROPRIATION DATA See Schedule		10. REQUISITIONING OFFICE ORCR	
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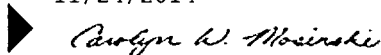
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB				12. F.O.B. POINT Destination	
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13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS	
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17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 072648579 The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference. The contractor shall perform services in Continued ...					

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)	
21. MAIL INVOICE TO:							
a. NAME RTP Finance Center						\$109,593.00	
b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive							
c. CITY Durham						17(i) GRAND TOTAL	
d. STATE NC							
e. ZIP CODE 27711							

22. UNITED STATES OF AMERICA BY (Signature) 11/24/2014 		23. NAME (Typed) Carolyn Mosinski TITLE: CONTRACTING/ORDERING OFFICER	
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**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER
11/24/2014

CONTRACT NO.
EP-W-10-056

ORDER NO.
0079

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>accordance with the attached statement of work dated November 5, 2014 (4 pages) and the Contractor's proposal dated November 13, 2014, in the amount of \$109,593.00.</p> <p>The task order funding amount is established at \$109,593.00, which the Contractor is not authorized to exceed. Any expenditure above this amount is at the Contractor's own risk. This task order is hereby fully funded.</p> <p>Services rendered under this task order are non-severable. This is a time and materials task order.</p> <p>TOPO: Tiffany Kollar Max Expire Date: 11/22/2015</p> <p>Admin Office: SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460</p> <p>Period of Performance: 11/21/2014 to 11/22/2015</p> <p>Support for the Waste Reduction Model</p> <p>Accounting Info: 15-16-B-31M-302DA1-2585-1531MRP001-001 BFY: 15 EFY: 16 Fund: B Budget Org: 31M Program (PRC): 302DA1 Budget (BOC): 2585 DCN - Line ID: 1531MRP001-001 Funding Flag: Partial Funded: \$109,593.00</p> <p>The obligated amount of award: \$109,593.00. The total for this award is shown in box 17(i).</p>				109,593.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$109,593.00

Task Order Statement of Work
Support for the Waste Reduction Model (WARM)
November 5, 2014

BACKGROUND

The Resource Conservation and Sustainability Division (RCSD) was formed within the EPA's Office of Resource Conservation and Recovery to implement the national MSW strategy "The Solid Waste Dilemma: An Agenda for Action." RCSD is responsible for fostering integrated waste management (including waste prevention and recycling), developing State program approval procedures, assessing the status of State programs, and ensuring successful implementation of the entire MSW Program nationwide, in support of RCRA Subtitle D implementation.

To facilitate these activities,

Materials that enter the waste stream have energy impacts (and associated GHG emissions) at each stage of their life cycle. These life cycle stages include:

- acquisition of raw materials,
- processing raw materials,
- manufacture of products from processed materials,
- product use by consumers, and
- product disposal.

Waste reduction practices, such as recycling and reuse, reduce the demand for raw material and energy inputs to the manufacturing stage of the life cycle, thereby conserving energy and reducing GHG emissions. The energy savings and GHG emissions reductions associated with recycling are driven largely by the difference between manufacturing the material using virgin inputs and manufacturing the material using recycled inputs. Energy savings and GHG emissions reductions can also result from waste *disposal* practices, such as waste combustors and landfill gas to energy systems.

Since the energy implications of waste management practices for specific materials and products accrue throughout the life cycle, product-specific energy factors typically require a life-cycle analysis to quantify the benefits. The Waste Reduction Model (WARM) is an EPA tool that uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices.

PURPOSE AND OBJECTIVES

The purpose of this task order is to provide support to ORCR's effort to quantify and articulate the important link between energy efficiency/climate change and management of materials, through:

- Analysis of new life cycle data for materials already addressed in WARM,
- Generation of GHG emissions factors from those analyses,
- Analysis of life cycle data for materials not yet addressed in WARM,
- Generation of GHG emissions factors for those new materials,
- Maintenance of WARM (both model and documentation), and
- Providing stakeholder support as it relates to the other activities of this task order.

SCOPE OF WORK

The Contractor shall have demonstrated experience and expertise in the development and use of WARM and related tools (ReCon, iWARM); in sources, production and use of life cycle inventory data; and outreach and communication with users of WARM.

The work to be completed and the schedule of deliverables are included in the tasks and subtasks detailed below.

TASK 1. PROGRAM SPECIFIC SUPPORT - ORCR HEADQUARTERS (Task 1 of Contract-level SOW)

The Contractor shall provide technical assistance to the Agency's program to promote the reduction, reuse and recycling of waste through maintenance and enhancement of the Waste Reduction Model (WARM). WARM uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices. The Contractor shall update WARM with new and/or updated material-specific LCI data for organics and electronics numbers.

Review of the organics LCI data was initiated in 2012 (EPA Contract No. EP-W-10-056, TO 40). In this review, 5 food pathways were chosen to add to the WARM model. In 2014, 3 of the 5 pathways were completed. In 2015, the last 2 pathways will be completed. All 5 pathways are needed to complete the updates to WARM which will incorporate each of the pathways as well as a general food waste category.

In creating these new pathways – new waste management activities will be added to WARM that include donation. In addition, the Contractor shall update WARM to include anaerobic digestion as a waste management option, utilizing the work that has already been conducted within this SOW to revise the emission factors for organics.

For anaerobic digestion, the contractor shall use aggregated life-cycle inventory (LCI) data and shall develop GHG Master information and template for anaerobic digestion as a waste management option, in a manner consistent with that currently used to support WARM. This will be consistent with the Intergovernmental Panel on Climate Change guidance for estimating GHG emissions.

The Contractor will update WARM and the WARM documentation with the revised emissions

In a continued effort to support EPA's work in the Sustainable Materials Management (SMM) challenges, WARM will begin exploring the next challenge focus area of electronics. This exploration will entail working with existing electronics tool such as the Electronics Environmental Benefit Calculator (EEBC) and figuring out how to incorporate or align WARM with their calculations to best serve our stakeholders. Some of these areas include updating of information in the EEBC, stakeholder guide for WARM users and updating our own WARM electronics category to improve the calculations within the EEBC calculator.

The Contractor will prepare the annual WARM updates to various factors in the model using current data sources

DELIVERABLES	DUE DATES
Revised Emissions Factors for Organics (last 2 factors)	January 2, 2015
Memo on the approach and incorporation of anaerobic digestion into WARM	January 5, 2015
Revised Calculations, Factors and/or Numbers for Source Reduction for new Emission Factors	February 2, 2015
Revised WARM documentation, incorporating new Emissions Factors for all changes	February 16, 2015
Update of WARM to Internet	February 25, 2015
Posting updated WARM documentation to Internet	February 2, 2015
Revised Calculations, Factors and/or Numbers for Donation	April 1, 2015
Revised Calculations, Factors and/or Numbers for Anaerobic Digestion	April 1, 2015
Memo on recommendations for updating WARM Electronics Category	May 15, 2015
Begin Implementation of Recommendations	September 10, 2015
Final Document	November 20, 2015

TASK 2. COMMUNICATIONS AND OUTREACH SUPPORT

(Task 3 of Contract-level SOW)

The Contractor shall provide communications and outreach support to stakeholders on use of WARM and interpretation of results. These stakeholder contacts will be forwarded to the Contractor by the TOCOR or her designee, and will include e-mail and telephone requests. In addition, the contractor shall (at the request of the EPA TOCOR or her designee) provide support

to EPA staff in proper application of WARM.

Each monthly progress report shall list the stakeholder support provided that month, including name, topic, and answer provided.

For the purposes of cost estimation, assume that 24 stakeholder/staff requests are sent to the Contractor for support.

As part of our continued improvement of WARM for our stakeholders, we will begin exploring moving WARM to a new platform in 2014. This platform is the Open Life Cycle Assessment (LCA) database. This open platform allows our stakeholders access to the data that is found in WARM. This type of access will allow the stakeholders to create their own customizable interface using only the factors for their specific needs. This exercise will not change the current WARM interface that EPA maintains – it will only allow for sharing of the data that is currently in our tool.

In FY15, WARM will work to update tools related to WARM that include iWARM and the Recon Tool. This project will begin with a scoping exercise to gather all new data sets since our last update to these tools and then incorporation of those data sets and related emission factors.

DELIVERABLES	DUE DATES
Monthly report including name, topic, and answer provided.	Monthly
Memo of results of data scoping exercise for iWARM and ReCon	December 15, 2014
Memo of incorporation of WARM data sets to Open LCA database	February 2, 2015
Work on new database formatting based on stakeholder recommendations for Open LCA	Summer 2015
Revise WARM to incorporate all formatted changes	October 15, 2015
Revised iWARM and ReCon tool posted to internet	October 15, 2015
Revised documentation for iWARM and ReCon posted to internet	October 30, 2015

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. 001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Schedule	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 072648579		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		X		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079	
				10B. DATED (SEE ITEM 13) 11/24/2014	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. FAR 52.243-3 Changes; FAR 52.232-22 Limitation of Funds
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.

Services rendered under this task order are non-severable. This is a time and materials task order.

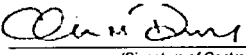
TOCOR: Tiffany Kollar Max Expire Date: 02/29/2016

The purpose of this modification is to extend the period of performance through 02/29/2016.

The total estimated price ceiling is hereby increased by \$141,603.00 to the new total amount of \$251,196.00.

This modification also adds incremental funding in the amount of \$36,969.00 to this Task
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christie M. Deskiewicz	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 09/08/2015

NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Order to perform on-going work through 02/29/2016. The new total amount of funds obligated to this Task Order is now \$146,562.00. The contractor shall not work beyond this point until further notice. All other terms and conditions remain the same.</p> <p>LIST OF CHANGES: Reason for Modification : Change Order Period Of Performance End Date changed from 22-NOV-15 to 29-FEB-16 Total Amount for this Modification: \$141,603.00 New Total Amount for this Award: \$251,196.00 Obligated Amount for this Modification: \$36,969.00 New Total Obligated Amount for this Award: \$146,562.00 Maximum Potential Expiration Date changed to : 02/29/2016</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 14-15-B-31M-302DA1-2585-1531MRP013-002 Beginning FiscalYear 14 Ending Fiscal Year 15 Fund (Appropriation) B Budget Organization 31M Program (PRC) 302DA1 Budget (BOC) 2585 Job # (Site/Project) Cost Organization DCN-LineID 1531MRP013-002 Amount: \$20,000.00 Subject To Funding: N</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 15-16-B-09Q2D-302DA2-2532-1509QI0019-001 Beginning FiscalYear 15 Ending Fiscal Year 16 Fund (Appropriation) B Budget Organization 09Q2D Program (PRC) 302DA2 Budget (BOC) 2532 Job # (Site/Project) Cost Organization DCN-LineID 1509QI0019-001 Amount: \$7,000.00 Subject To Funding: N Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/001PAGE OF
3 3NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>NEW ACCOUNTING CODE ADDED: Account code: 15-16-B-31M-302DA1-2585-1531MRP015-001 Beginning Fiscal Year 15 Ending Fiscal Year 16 Fund (Appropriation) B Budget Organization 31M Program (PRC) 302DA1 Budget (BOC) 2585 Job # (Site/Project) Cost Organization DCN-LineID 1531MRP015-001 Amount: \$9,969.00 Subject To Funding: N Delivery Location Code: HPOD RRB HPOD RRB US Environmental Protection Agency USEPA Ronald Reagan Building (RRB) 1300 Pennsylvania Avenue NW Washington dc 20004 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 11/21/2014 to 02/29/2016</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Schedule	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
CODE 072648579		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079	
				10B. DATED (SEE ITEM 13) 11/24/2014	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule
Net Increase: \$30,000.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR 52.232-22 Limitation of Funds

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.

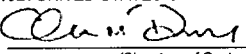
Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Tiffany Kollar Max Expire Date: 02/29/2016

The purpose of this modification is to add incremental funding in the amount of \$30,000.00 to Task Order 0079 on EP-W-10-056. The new total amount of funds obligated to this Task Order is now \$176,562.00. The contractor shall not work beyond this point. The total estimated price ceiling for this Task Order remains at \$251,196.00. All other terms and conditions remain the same.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christie M. Deskiewicz	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 10/01/2015

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/002PAGE OF
2 2NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>LIST OF CHANGES: Reason for Modification : Funding Only Action Obligated Amount for this Modification: \$30,000.00 Incremental Funded Amount changed from \$146,562.00 to \$176,562.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 15-16-B-31M-302DA1-2585-1531MRP022-001 Beginning Fiscal Year 15 Ending Fiscal Year 16 Fund (Appropriation) B Budget Organization 31M Program (PRC) 302DA1 Budget (BOC) 2585 Job # (Site/Project) Cost Organization DCN-LineID 1531MRP022-001 Amount: \$30,000.00 Subject To Funding: N</p> <p>Delivery Location Code: HPOD RRB HPOD RRB US Environmental Protection Agency USEPA Ronald Reagan Building (RRB) 1300 Pennsylvania Avenue NW Washington dc 20004 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 11/21/2014 to 02/29/2016</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 003		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Schedule	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
9C. DATED (SEE ITEM 11)		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079		10B. DATED (SEE ITEM 13) 11/24/2014	
CODE 072648579		FACILITY CODE		11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS	

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule Net Increase: \$74,634.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR 52.232-22 Limitation of Funds

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.

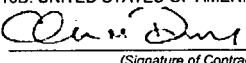
Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Tiffany Kollar Max Expire Date: 02/29/2016

The purpose of this modification is to add incremental funding in the amount of \$74,634.00 to Task Order 0079. The new total amount of funding obligated to this Task Order is now \$251,196.00. This Task Order is now fully funded. The contractor shall not work beyond this point.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christie M. Deskiewicz	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 11/17/2015

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED EP-W-10-056/0079/003	PAGE	OF
		2	2

NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>All other terms and conditions remain the same.</p> <p>LIST OF CHANGES: Reason for Modification : Funding Only Action Obligated Amount for this Modification: \$74,634.00 Incremental Funded Amount changed from \$176,562.00 to \$251,196.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 16-17-B-31M-302DA1-2585-1631MRP006-001 Beginning FiscalYear 16 Ending Fiscal Year 17 Fund (Appropriation) B Budget Organization 31M Program (PRC) 302DA1 Budget (BOC) 2585 Job # (Site/Project) Cost Organization DCN-LineID 1631MRP006-001 Amount: \$74,634.00 Subject To Funding: N</p> <p>Delivery Location Code: HPOD RRB HPOD RRB US Environmental Protection Agency USEPA Ronald Reagan Building (RRB) 1300 Pennsylvania Avenue NW Washington dc 20004 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 11/21/2014 to 02/29/2016</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 004		3. EFFECTIVE DATE 12/29/2016		4. REQUISITION/PURCHASE REQ. NO. See Schedule	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 072648579		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079	
				10B. DATED (SEE ITEM 13) 11/24/2014	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not. ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.

Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Tiffany Kollar Max Expire Date: 12/31/2016

The purpose of this administrative modification is to re-instate the previously executed modification 004 that was inadvertently deleted by another Contracting Officer (Meghan Thomas Meyers) in EAS. The fully executed bilateral modification 004 extended the period of performance of task order 0079 to 31 December 2016 on 24 February 2016 and was signed and distributed by Christie Deskiewicz but never released in EAS.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 12/29/2016

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/004PAGE OF
2 2NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>LIST OF CHANGES: Reason for Modification : Other Administrative Action Period Of Performance End Date changed from 29-FEB-16 to 31-DEC-16 Maximum Potential Expiration Date changed to : 12/31/2016 CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Delivery Location Code: HPOD RRB HPOD RRB US Environmental Protection Agency USEPA Ronald Reagan Building (RRB) 1300 Pennsylvania Avenue NW Washington dc 20004 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 11/21/2014 to 12/31/2016</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 6		
2. AMENDMENT/MODIFICATION NO. 005		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Schedule		5. PROJECT NO. (If applicable)	
6. ISSUED BY SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460		CODE SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050				(x)			9A. AMENDMENT OF SOLICITATION NO.
							9B. DATED (SEE ITEM 11)
				X			10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079
							10B. DATED (SEE ITEM 13) 11/24/2014
CODE 072648579		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule
Net Increase: \$66,811.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. FAR 52.243-3 - Changes: Time and Materials or Labor Hour
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference. Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Nathan Wittstruck Max Expire Date: 02/28/2017

The purpose of this bilateral modification is to:

1. Incorporate the revised Statement of Work: Revision 1 dated 03 November 2016 for Task 2 only;
 2. Approve and incorporate herein the contractor's cost estimate dated 01 December 2016 for task 2 only in the amount of \$66,811.00;
 3. Modify the obligation/funding ceiling of this task order;
- Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 12/29/2016

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/005PAGE OF
2 6NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>4. Modify the task order ceiling price; 5. Extend the period of performance of this task order to 28 February 2017; 6. Re-assign the role of Task Order Contracting Officer's Representative (TOCOR) to Nathan Wittstruck. Email: wittstruck.nathan@epa.gov Phone: 703.308.8408</p> <p>Funding in the amount of \$66,811.00 is obligated to this task order, increasing the funding ceiling by \$66,811.00, from \$251,196.00 to \$318,007.00. which the contractor is not authorized to exceed. The contractor exceeds this funding ceiling at its own risk.</p> <p>As an equitable adjustment for the subject changes to task 2, the task order ceiling price is hereby increased by \$66,811.00, from \$251,196.00 to \$318,007.00. By signing, the contractor hereby releases the Government from any and all liability for further equitable adjustments attributable to the work specified under this change order. Contractor incurred expenses shall not exceed the task order ceiling price at \$318,007.00.</p> <p>The period of performance of subject task order is extended, from 31 December 2016 to 28 February 2017.</p> <p>All other terms and conditions remain unchanged.</p> <p>LIST OF CHANGES: Reason for Modification : Change Order Period Of Performance End Date changed from 31-DEC-16 to 28-FEB-17 Total Amount for this Modification: \$66,811.00 New Total Amount for this Version: \$318,007.00 New Total Amount for this Award: \$318,007.00 Obligated Amount for this Modification: \$66,811.00 TOCOR (Task Order Contracting Officer's Representative) changed to : Nathan Wittstruck Maximum Potential Expiration Date changed to : 02/28/2017</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 Total Amount changed from \$251,196.00 to \$318,007.00 Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/005PAGE OF
3 6NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Obligated Amount for this modification: \$66,811.00 CHANGES FOR DELIVERY LOCATION: HPOD RRB Amount changed from \$251,196.00 to \$318,007.00 NEW ACCOUNTING CODE ADDED: Account code: 16-17-B-31M-302DA2-2585-1631MRP020-001 Beginning Fiscal Year 16 Ending Fiscal Year 17 Fund (Appropriation) B Budget Organization 31M Program (PRC) 302DA2 Budget (BOC) 2585 Job # (Site/Project) Cost Organization DCN-LineID 1631MRP020-001 Quantity: 0 Amount: \$40,665.00 Percent: 16.18855 Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 NEW ACCOUNTING CODE ADDED: Account code: 16-17-B-31M-302DA1-2585-1631MRP020-002 Beginning Fiscal Year 16 Ending Fiscal Year 17 Fund (Appropriation) B Budget Organization 31M Program (PRC) 302DA1 Budget (BOC) 2585 Job # (Site/Project) Cost Organization DCN-LineID 1631MRP020-002 Quantity: 0 Amount: \$26,146.00 Percent: 10.40861 Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency Continued ...				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/005PAGE OF
4 6NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>Delivery Location Code: HPOD RRB HPOD RRB US Environmental Protection Agency USEPA Ronald Reagan Building (RRB) 1300 Pennsylvania Avenue NW Washington dc 20004 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 11/21/2014 to 02/28/2017</p>				

TASK 2. COMMUNICATIONS AND OUTREACH SUPPORT (Task 3 of Contract-level SOW)

The contractor shall provide communications and outreach support to stakeholders on use of WARM and interpretation of results. These stakeholder contacts will be forwarded to the contractor by the TOCOR or his designee, and will include e-mail and telephone requests. In addition, the contractor shall (at the request of the EPA TOCOR or his designee) provide support to EPA staff in proper application of WARM.

Each monthly progress report shall be sent to the TOCOR and shall list the stakeholder support provided that month, including name, question, and answer provided.

For the purposes of cost estimation, assume that 24 stakeholder/staff requests are sent to the contractor for support.

As part of our continued improvement of WARM for our stakeholders, EPA began exploring moving WARM to a new platform in 2014. This platform is the Open Life Cycle Assessment (openLCA) database. This open platform allows our stakeholders the same access to evaluate environmental impacts from different management practices as WARM. The new platform will eventually allow the stakeholders to create their own customizable interface using the factors they specifically need.

The categories and management options in WARM openLCA will be based upon WARM Version 14 – recognizing that currently that WARM Version 14 is available as an Excel product. Through this task order, WARM openLCA Version 14 and the WARM Version 14 Excel product will both be maintained. In addition, the contractor shall review and update openLCA user's guide and post the final WARM openLCA user's guide to the WARM website.

The anticipated move to only WARM openLCA is expected to take place when we move to WARM openLCA Version 15, but that is outside the scope of this statement of work.

WARM Open LCA Version 14 will require the conversion of the WARM Version 14 Excel product tool to a separate downloadable application as well as all related web pages, instructions and documentation to be in line with the EPA web requirements. **It is understood that this work on WARM openLCA has been initiated and is in the final stages of completion. Steps before completion may include finalizing Anaerobic Digestion as a management pathway, QA/QC checks between WARM Version 14 and WARM openLCA Version 14 and user interface checks.**

In FY15, work was performed to update tools related to WARM that include Individual Waste Reduction Model (iWARM) and the Recycled Content (ReCon) Tool. This project began with a scoping exercise to gather all new data sets since the last update to these tools and then incorporation of those data sets and related emission factors. **iWARM and ReCon will not be**

updated under this task order.

As part of the updates, there is a need to quality assurance (QA/QC) related tools, specific to WARM openLCA Version 14. The contractor will generally conduct an independent review of the mathematical accuracy of the underlying calculations and formulas.

Check that emission factors for individual materials have been rolled up into material categories correctly. Spot check results for test runs in which some entry cells are left blank (that are not mandatory to derive results).

TABLE 2: DELIVERABLES AND ESTIMATED DATES FOR COMPLETION

DELIVERABLES	DUE DATES
openLCA Database	
Contractor shall harmonize values in WARM openLCA database and WARM GHG Master to align with WARM Version 14. This includes basic QA/QC checks.	January 15, 2017
Contractor shall review and update WARM OpenLCA user's guide and documentation	February 1, 2017
Contract shall provide final versions of revised documentation and user's guide ready to post on the WARM website	February 28, 2017
Contractor shall provide WARM openLCA Version 14 as a final product that EPA can post to the WARM website	February 28, 2017

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 006		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 072648579		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079	
				10B. DATED (SEE ITEM 13) 11/24/2014	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of the Parties
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference. Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Nathan Wittstruck Max Expire Date: 04/30/2017

The purpose of this modification is to extend the period of performance of this task order through 30 April 2017, at no additional cost to the Government. All other terms and conditions remain unchanged.

LIST OF CHANGES:

Reason for Modification : Supplemental Agreement for work within scope

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 02/23/2017

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/006PAGE OF
2 2NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Period Of Performance End Date changed from 28-FEB-17 to 30-APR-17 Total Amount for this Modification: \$0.00 New Total Amount for this Version: \$0.00 New Total Amount for this Award: \$318,007.00 Maximum Potential Expiration Date changed to : 04/30/2017</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 Period of Performance: 11/21/2014 to 04/30/2017</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 007		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x) 9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
CODE 072648579		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079 10B. DATED (SEE ITEM 13) 11/24/2014	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of the Parties
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference. Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Nathan Wittstruck Max Expire Date: 12/31/2017

The purpose of this modification is to extend the period of performance of this task order through 31 December 2017, at no additional cost to the Government. Table 2: Deliverables and Estimated Dates for Completion is modified accordingly under Attachment I to modification 007. All other terms and conditions remain unchanged.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 04/12/2017

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED EP-W-10-056/0079/007	PAGE 2	OF 2
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NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>LIST OF CHANGES:</p> <p>Reason for Modification : Supplemental Agreement for work within scope</p> <p>Period Of Performance End Date changed from 30-APR-17 to 31-DEC-17</p> <p>Maximum Potential Expiration Date changed to : 12/31/2017</p> <p>Payment:</p> <p>RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711</p> <p>Period of Performance: 11/21/2014 to 12/31/2017</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. 008		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Schedule	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 072648579		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079	
				10B. DATED (SEE ITEM 13) 11/24/2014	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule Net Increase: \$252,307.99

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. FAR 52.243-3 - Changes: Time and Materials or Labor Hour
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not. ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference. Services rendered under this task order are non-severable. This is a time and materials task order.

TOCOR: Nathan Wittstruck Max Expire Date: 12/31/2017

The purpose of this bilateral modification is to:

1. Incorporate the revised Statement of Work: Revision 12 dated 16 August 2017;
2. Approve and incorporate herein the contractor's cost estimate dated 26 September 2017 in the amount of \$273,992.00;

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mark Heare	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Mark Heare (Signature of Contracting Officer)	16C. DATE SIGNED 09/29/2017

NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>3. Obligate funding in the amount of \$215,338.99 to this task order and;</p> <p>4. Increase task order ceiling to \$591,999.00</p> <p>Funding in the amount of \$215,338.99 is obligated to this task order, increasing the incremental funding by \$215,338.99, from \$318,007.00 to \$533,345.99 which the contractor is not authorized to exceed. The contractor exceeds this funding ceiling at its own risk. As an equitable adjustment for the subject changes to this task order, the task order ceiling price is hereby increased by \$273,992.00, from \$318,007.00 to \$591,999.00. By signing, the contractor hereby releases the Government from any and all liability for further equitable adjustments attributable to the work specified under this change order. Contractor incurred expenses shall not exceed the task order ceiling price at \$591,999.00.</p> <p>NOTE to RTP: Funds in the amount of \$36,969.00 have already been obligated in CDW per modification 1. Due to EAS not incrementally funding this amount it created an error for modification 8. The correct funding amount obligated to modification 8 is \$215,338.99.</p> <p>LIST OF CHANGES: Reason for Modification : Funding Only Action Obligated Amount for this Modification: \$215,338.99 New Total Obligated Amount for this Award: \$533,345.99 Incremental Funded Amount changed: from \$318,007.00 to \$533,345.99 New Total Ceiling Amount for this Award: \$591,999.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 Total Ceiling Amount changed from \$318,007.00 to \$591,999.00 Obligated Amount for this modification: \$215,338.99 Incremental Funded Amount changed from \$318,007.00 to \$533,345.99</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 17-18-B-31M-302DA1-2585-1731MRP019-001 Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/008PAGE OF
3 3NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	DCN-LineID 1731MRP019-001 Amount: \$201,644.79 NEW ACCOUNTING CODE ADDED: Account code: 16-17-B-31M-302DA1-2585-1731MRP019-002 DCN-LineID 1731MRP019-002 Amount: \$11,927.18 NEW ACCOUNTING CODE ADDED: Account code: 16-17-B-31M-302DA2-2585-1731MRP019-003 DCN-LineID 1731MRP019-003 Amount: \$1,767.02 Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 FOB: Destination Period of Performance: 11/21/2014 to 12/31/2017				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 2		
2. AMENDMENT/MODIFICATION NO. P00009		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460		CODE SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050				(x)		9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
				x		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0079	
						10B. DATED (SEE ITEM 13) 11/24/2014	
CODE 072648579		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
x	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: IAW 52.217-8 Option to Extend Services
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

The purpose of this bi-lateral modification is to do the following:

a) Extend the period of performance of this task order to April 30, 2018

b) All other terms and conditions remain unchanged

TOCOR: Nathan Wittstruck Max Expire Date: 12/31/2017

LIST OF CHANGES:

Reason for Modification : Supplemental Agreement for work within scope

Total Amount for this Modification: \$0.00

New Total Amount for this Version: \$0.00

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Tiffaney Wilson	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 12/28/2017

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-10-056/0079/P00009PAGE OF
2 2NAME OF OFFEROR OR CONTRACTOR
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	New Total Amount for this Award: \$591,999.00 Buyer changed from Marneice Wise to Tiffaney Wilson Contracting Officer changed from Mark Heare to Tiffaney Wilson Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 Period of Performance: 11/21/2014 to 12/31/2017				